| | Application No. | Applicant(s) |
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| Notice of Allowability | 10/603,956 | ARMBRUSTER ET AL. |
| | Examiner | Art Unit |
| | S. Mark Clardy | 1616 |
| The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313 | ears on the cover sheet wi (OR REMAINS) CLOSED in or other appropriate commit IGHTS. This application is: | ith the correspondence address n this application. If not included unication will be mailed in due course. THIS |
| 1. This communication is responsive to IDS filed July 16, 200 | <u>14</u> . | |
| 2. The allowed claim(s) is/are <u>1-58</u> . | | |
| 3. The drawings filed on are accepted by the Examine | r. | |
| 4. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents | been received. been received in Application | on No , |
| International Bureau (PCT Rule 17.2(a)). * Certified copies not received: | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | of this communication to file ENT of this application. | a reply complying with the requirements |
| 5. A SUBSTITUTE OATH OR DECLARATION must be subminification (PTO-152) which give | itted. Note the attached EXA is reason(s) why the oath or | AMINER'S AMENDMENT or NOTICE OF declaration is deficient. |
| CORRECTED DRAWINGS (as "replacement sheets") mus (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the | on's Patent Drawing Review Amendment / Comment or | in the Office action of |
| DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT F | sit of BIOLOGICAL MATE | ERIAL must be submitted. Note the |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892) | 5. □ Notice of Inf | ormal Patent Application (PTO-152) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | | Immary (PTO-413), |
| Information Disclosure Statements (PTO-1449 or PTO/SB/04 Paper No./Mail Date 7/16/04 Examiner's Comment Regarding Requirement for Deposit of Biological Material | Paper No./I B), 7. ☐ Examiner's A | Mail Date Amendment/Comment Statement of Reasons for Allowance |
| | 3. <u>G</u> 94101 | · · · · · · · · · · · · · · · · · · · |

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Claims 1-58 are pending in this application.

Applicants' claims are drawn to selective synergistic herbicidal compositions and methods comprising the following components (claims 1-43: in amounts to provide the indicated application rates in lbs/acre):

Claims 50-55, 13-22, 35-43 recite:

Quinclorac (0.1-1)

A selective protox (protoporphyrinogen oxidase or PPO) inhibitor¹ (0.005 - 0.06) Claims 44-49, 56-58, 1-12, 23-34 recite the above components, plus:

A selective auxinic agent².

(0.15 - 2).

Claims 1-58 are allowed.

The following is an examiner's statement of reasons for allowance.

The following references are cited herein: Anderson (US 5,877,117) and Jimoh (US 6,689,719).

Anderson et al teach the potentiation of herbicidal compositions comprising quinclorac and auxin transport inhibitors (abstract), specifically phenylureas (column 1, and claim 1). Other herbicides are disclosed as being potentiated by the auxin transport inhibitors, including auxinic growth regulators (col 2, lines 55-60), and cell membrane disruptors such as oxyflurfen (col 3, lines 58-60). Thus, the herbicidal components disclosed herein were known, as taught in Anderson et al, or as evidenced by their designation using a common name.

Claim 8: carfentrazone, sulfentrazone, pyraflufen, flumioxazin, fluthiacet, oxyfluorfen

² Claim 12: phenoxy, benzoic, pyridine, quinolinecarboxylic acid compounds. See list on p. 5: 2,4-D, 2,4-DB, MCPA, MCPP, MCPB, 2,4,5-T, 2,3,6-TBA, dicamba, TCA, methane arsonic acid (MAA), etc.

Jimoh teaches stable liquid microemulsion compositions comprising glyphosate and carfentrazone-ethyl (abstract), optionally comprising an additional herbicidal component in the oil phase (columns 6-8) such as quinclorac (col 7, line 21) or PPO inhibitors (col 8, lines 11-28).

While it is *prima facie* obvious to combine two or more herbicidal agents in order to make another herbicidal composition³, applicants have presented data in the specification which demonstrates unexpected synergistic effects for the combination of quinclorac with more than one PPO inhibiting herbicide.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 571-272-0611. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on 571-272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Mark Clardy Primary Examiner Art Unit 1616

September 29, 2004

³ It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.